AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (Currently Amended) An aspartic enzyme that produces plasma protein fragments having an inhibitory activity to metastasis and growth of cancer. having the following properties:
 - (a) a molecular weight of about 45 kDa as measured by SDS electrophoresis under non-reduced condition;
 - (b) a N-terminal amino acid sequence LVRIPLHKFT (SEQ ID NO:1);
 - (c) degrades plasma proteins at an acidic pH range of not more than pH 5.0 to produce plasma protein fragments having an inhibitory activity to metastasis and growth of cancer; and
 - (d) is an aspartic enzyme having a N-terminal amino acid sequence that is homologous to a cathepsin D precursor.

2. (Canceled)

3. (Currently Amended) The enzyme that produces plasma protein fragments of claim 1 or 2 wherein said plasma proteins to be fragmented are selected from the group consisting of plasminogen, fibronectin, vitronectin and human hepatocyte growth factor (HGF).

Docket No.: 0020-4841P

Application No. 09/806,568
Art Unit 1642

Reply to Office Action of May 19, 2005

4. (Previously Presented) The enzyme that produces plasma protein fragments of claim

1 wherein said enzyme cleaves plasminogen at 73L-74F and/or 451L-452P to produce fragments

comprising Kringles 1 to 4 of plasminogen.

5. (Withdrawn) Plasma protein fragments that are produced from degradation by the

action of the enzyme that produces plasma protein fragments as set forth in claim 1 and have an

inhibitory activity to metastasis and growth of cancer.

6. (Withdrawn) The plasma protein fragments of claim 5 that are derived from plasma

proteins selected from the group consisting of plasminogen, fibronectin, vitronectin and human

hepatocyte growth factor (HGF).

7. (Withdrawn) The plasma protein fragments of claim 5 or 6 comprising Kringles 1 to 4

plasminogen.

8. (Withdrawn) The plasma protein fragments of claim 5 or 6 comprising heparin-

binding domain of fibronectin.

Docket No.: 0020-4841P

Application No. 09/806,568

Art Unit 1642

Reply to Office Action of May 19, 2005

9. (Withdrawn) A process for preparing plasma protein fragments having an inhibitory

activity to metastasis and growth of cancer, which comprises reacting plasma protein fragments

as set forth in claim 1.

10. (Withdrawn) The process of claim 9 wherein said process further comprises

specifically isolating the plasma protein fragments having an inhibitory activity to metastasis and

growth of cancer with a resin having a heparin carrier.

11. (Previously Presented) A medicament for treating solid cancer comprising as a

major ingredient the enzyme that produces plasma protein fragments as set forth in claim 1.

12. (Canceled)

13. (Withdrawn) A medicament for treating and preventing disease conditions

associated with vascularization such as cancer (solid cancer), diabetic retinosis and rheumatism

comprising as a major ingredient the plasma protein fragments as set forth in claim 5.

14. (Withdrawn) A medicament for treating and preventing cancer comprising as a

major ingredient the plasma protein fragments as set forth in claim 5.

Application No. 09/806,568 Art Unit 1642 Reply to Office Action of May 19, 2005 Docket No.: 0020-4841P

15. (Currently Amended) The enzyme of elaim 2, claim 1, wherein the plasma protein fragments have a molecular weight of 40 or 43 kDa comprising Kringle 1 to Kringle 4.

16. (Canceled)

17. (**Previously Presented**) An aspartic enzyme that produces plasma protein fragments having an inhibitory activity to metastasis and growth of cancer wherein said enzyme is active in an acidic pH range and which is inhibited by an aspartic protease inhibitor.